National Aeronautics and Space Administration

Saturn Rollout, 1969

Historic Properties

August 2005

Introduction

This brochure identifies historic properties listed on The National Register of Historic Places under the designation NASA, John F. Kennedy Space Center. The Register is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, and administered by the National Park Service, properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The properties are distinguished by having been documented and evaluated according to uniform standards. It includes landmarks of American achievement as well as properties that reflect the lives of ordinary people in communities across the nation.

Central Instrumentation Facility, 1965

Central Instrumentation Facility

The Central Instrumentation Facility (CIF) is a three-story building centrally located in Kennedy Space Center's Industrial Area. This building has special design features needed for housing computers, instrumentation and laboratory equipment. The CIF was built to provide support to all NASA launch complexes both on KSC and the Cape Canaveral Air Force Station, part of the Eastern Test Range. The facility has helped KSC receive, monitor, process, display and record data for the Apollo/ Saturn V launch vehicles.

Central Instrumentation Facility, 1996

The CIF also houses the Central Timing Facility, where a precision clock drives countdown clocks and other timing devices on KSC that require a high degree of accuracy. This Apollo era communication facility was supplemented and modified to meet the needs of the ongoing Space Shuttle Program.

Crawlerway Launch Complex 39

Consisting of two 40-foot-wide lanes separated by a 50-foot median, the Crawlerway provides a traveling surface for the Crawler Transporter that carries Space Shuttle vehicles from the Vehicle Assembly Building to Launch Pads 39A & 39B. Construction of the Crawlerway from the VAB to Pad A began in November 1963 and the extension to pad B was completed in February 1966. The Crawlerway was originally built for moving Saturn rockets and support equipment to the Launch Pads during the Apollo era.

Crawlerway, 1964

Crawlerway, 2000

Headquarters Building, 1965

Headquarters Building

The four story KSC Headquarters Building was completed in 1965 as the primary administrative facility. It contains general office areas, conference rooms and personnel services with a fourth floor of executive suites for the KSC director and his or her staff. The building was designed in the International Style which originated in Europe in the late 1920s with hallmark characteristics including flat roof, ribbon windows and horizontality.

Headquarters Building, 1996

The Headquarters Building still retains the same basic configuration as in 1968 and possesses exceptional historical importance as KSC's administrative center for the launch of the Apollo spacecraft from Launch Complex 39.

Launch Complex 39, 1965

Launch Complex 39

Launch Complex 39 was originally designed to launch American astronauts toward the moon. In less than four years, it was transformed into an operational spaceport for erecting rockets and spacecraft in one area and transporting them to another location for launch. This vast complex includes support, checkout, and launch facilities that stretch inland from the Atlantic Ocean across four miles of land that was made up of intermittent marshes and sandy scrub growth prior to 1963. The launch complex, with its 322 facilities, was placed on the National Register of Historic Places in 1973 and is classified as an historic site.

Launch Complex 39, 2000

Saturn IB, Saturn V and the Space Shuttle have been launched from LC-39.

Launch Complex 39 Pad A, 1967

Launch Complex 39 Pad A

Pad A, which is shaped like an octagon, was completed in 1965 after two years of construction. Each launch pad area consists of several major components. During the Apollo era, concrete and steel support piers were built-up from the hardstand to support the Mobile Launcher which also carried the Launch Umbilical Tower and the Saturn Launch Vehicle.

Launch Complex 39 Pad A, 2001

After conversion for Space Shuttle operations, a permanent Fixed Service Structure and Rotating Service Structure were installed. The first Saturn V launch, AS-501, and the first Space Shuttle launch occurred from Pad A. This complex was designated as an Historic District in 1998.

Launch Complex 39 Pad B, 1975

Launch Complex 39 Pad B

Launch Pad B, completed in 1967 after three years of construction, has the same configuration as Pad A. Each launch pad area covers approximately one-quarter square mile and the pads are 8,716 feet apart. Altogether, each pad contains 68,000 cubic yards of concrete and 5,100 tons of reinforcing steel. Pad B was used for Apollo 10, the only Saturn V launch from Pad B. Also launched were the three Skylab crews and the Apollo Soyuz Test Project.

Launch Complex 39 Pad B, 2000

The same changes to convert Pad A to the era of the Space Shuttle also occurred at Pad B. The first shuttle flight from Pad B was STS 51-L with Challenger. This complex was designated as an Historic District in 1998.

Vehicle Assembly Building, 1966

Vehicle Assembly Building

The Vehicle Assembly Building (VAB) is one of the world's largest buildings by volume and was the largest of all when it was completed in 1966, following nearly three years of construction. It provides four high bay cells for vertical assembly, checkout, and protective storage of launch vehicles and spacecraft.

Dr. Kurt H. Debus, KSC's first Center Director, signs his name to the final beam,1965

Vehicle Assembly Building, 1998

Two of the cells were outfitted for assembly and checkout of the Saturn V launch vehicles and one cell was outfitted for Saturn IB launch vehicles. The first Mobile Launcher was moved into the building in January 1966. The first Apollo-Saturn V, a facilities test model, was rolled out of the building in May that year. The design of the VAB was planned around the handling of Saturn V rocket stages. The box-type structure is more economical and eliminates the need for a separate crane for each bay. The VAB was topped out at 525 feet in April 1965 with the installation of the last steel beam, which was painted white and included the NASA symbol. NASA and contractor employees signed their names before the beam was fitted under the roof over the transfer aisle.

Launch Control Center, 1969

Launch Control Center

The Launch Control Center (LCC) is a four-story concrete structure located on the east side of the Vehicle Assembly Building which is connected by an enclosed utilities bridge. As its name implies, the building is used for controlling pre-launch and launch operations. To do this, the building has four firing rooms, which serve as launch control, and they also can serve the four high-bay cells in the Vehicle Assembly Building. The LCC was completed in 1965 and won the Architectural Award for Industrial Design of the Year. As with all of LC-39 it was originally built to support the launch of Saturn V rockets.

Launch Control Center, 1998

The LCC remains largely the same in configuration as when it was built for the Apollo program, but the firing rooms were modified for the launch of the Space Shuttle.

Crawler Transporter, 1969

Crawler Transporter

The two Crawler Transporters were constructed for Launch Complex 39 to move the Mobile Launcher and assembled Apollo-Saturn vehicles as well as the Mobile Service Structure. The transporters became operational in 1966. At the time of their construction, Crawlers were believed to be among the largest tracked vehicles in the world. Each travels at a maximum speed of 1 mile per hour when loaded and 2 mph when unloaded. The American Society of Mechanical Engineers dedicated the Crawler Transporters as National Historic Mechanical Engineering Landmarks on February 3, 1977.

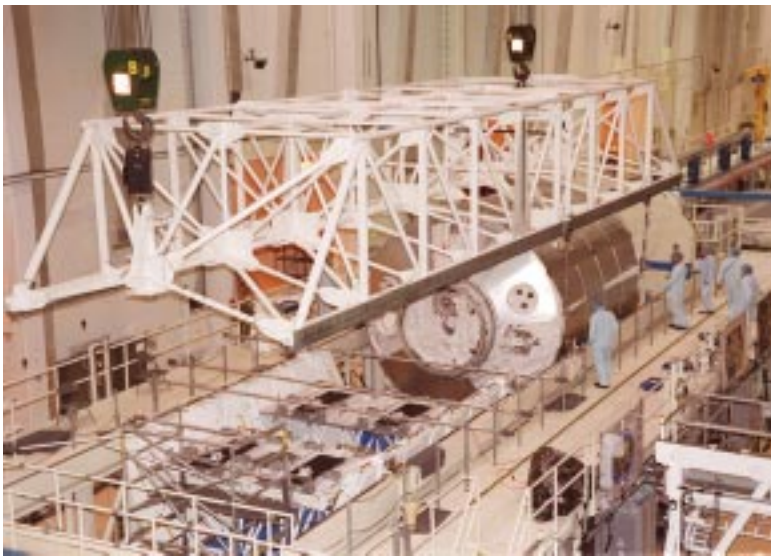
The Crawlers are used only as transporters for space vehicles and both continue to actively support the Space Shuttle Program.

Crawler Transporter, 1998

Operations and Checkout Building, 1972

Operations and Checkout Building

The Operations and Checkout (O&C) Building, also originally known as the Manned Spacecraft Operations Building, was completed 1964. The facility is a five-story structure located east of the Headquarters Building and includes low and high bay areas. The O&C Building was used for assembly and checkout of the Apollo spacecraft modules and also provided crew training and preflight preparations. After testing, the mated spacecraft components - the command module, the lunar module and the service module - would be moved from the integrated test area to the Vehicle Assembly Building in a vertical attitude, ready for stacking on top of the launch vehicle.



Operations and Checkout Building, 2001

The O&C Building is still in active use and has been reconfigured to accommodate the needs of the Space Shuttle Program. The experiment flight hardware for the Spacelab missions was integrated into the modules there. The astronaut quarters are also located in the O&C Building.

LC-39 Press Site Clock and Flag Pole, 1969

LC-39 Press Site Clock And Flag Pole

The Press Site functions as the primary site for news media activities at the Kennedy Space Center. The special clock counts down time to liftoff and, although the interior mechanism has been changed, the exterior of the clock is the original used during the Apollo era (as is the nearby flagpole). Originally, a 350-seat covered grandstand faced the launch pads, allowing media cameras to capture the countdown clock, flag pole and launch pads in one shot. The grandstand was condemned and removed following Florida hurricanes that hit Central Florida in 2004. The leveled grandstand area is still used for photos and broadcasts featuring the clock and U.S. flag on the flagpole.

LC-39 Press Site Clock and Flag Pole, 1994

During Apollo 11, the Press Site held the largest gathering of the press in history when more than 3,000 journalists attended the launch.

Launch Complex 19, 1966

Historic Sites on Cape Canaveral Air Force Station

Launch Complex 5/6

Complex 5/6 launched the Mercury Redstone suborbital flights piloted by astronauts Alan Shepard and Gus Grissom.

Launch Complex 13

The complex was used for five lunar orbiter missions and the Mariner 3 mission.

Launch Complex 14

Four Mercury Atlas flights occurred from this complex, including the first manned orbital flight by astronaut John Glenn.

Launch Complex 19

Launch Complex 19 was used for 10 manned Gemini orbital flights aboard Titan II rockets.

Launch Complex 34, 1968

Launch Complex 26

The complex is dual-pad, single blockhouse and was used to launch America's first satellite, Explorer 1, on a modified Redstone rocket called a Jupiter C.

Launch Complex 34

Complex 34 was the first launching site in the world built expressly for the peaceful exploration of space. The first Apollo flight, Apollo 7, was launched there. It is also the site of the Apollo 1 fire that killed three astronauts during a ground test.

Historic Properties

Atlantis Rollover, 2003

KSC Library Archives
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